

**Claims**

- 1) A method of determining the location and status of a subject upon the occurrence of a trigger event comprising:
  - 1) activating a sensor to a predetermined level corresponding to a class of event upon the occurrence of an event;
  - 2) transmitting an event signal to a central station indicating the class of event;
  - 3) monitoring for acknowledgement of receipt of signal;
  - 4) receiving acknowledgement signal, or retransmitting event signal;
  - 5) upon receipt of acknowledgement signal, entering a monitor mode.
- 2) A method as claimed in claim 1, wherein said monitor mode comprises at least monitoring subject acceleration, and collision notification sensors.
- 3) A vehicle location device comprising a core processor equipped with a waterfall memory and a communication interface, sensors including a compass, an accelerometer, an ignition circuit sensor and a speed sensor, a GPS receiver and a data modem, wherein said data modem is adapted to transmit position and status information received from said GPS and said sensors, and said memory is adapted to store sensed data on a continuous basis for real time or delayed monitoring as desired.